

France, Becky (DEQ)

From: Lockridge, Anthony L. NAO [Anthony.L.Lockridge@usace.army.mil]
Sent: Friday, March 14, 2014 1:32 PM
To: France, Becky (DEQ)
Subject: PCB (3).docx (UNCLASSIFIED)
Attachments: PCB (3).docx

Classification: UNCLASSIFIED
Caveats: NONE

Bill Siple has sent this to Mr. Robert Tate regarding the PCB.

Thanks Anthony L

Classification: UNCLASSIFIED
Caveats: NONE



Reply to
Attention of

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
GATHRIGHT DAM AND LAKE MOOMAW PROJECT
605 COLES MOUNTAIN ROAD
COVINGTON VA 24426

Department of Environmental Quality/ Attention: Robert Tate
West Central Regional Office
3019 Peters Creek Road
Roanoke, Va. 24019-2738

Re: Exception request for PCB testing.

Mr. Robert Tate:

I would like to request an Exception for PCB testing at the Morris Hill Wastewater Treatment Plant at the Gathright Dam and Lake Moomaw Project in Covington, VA. I do not believe that testing for PCB's is necessary at this plant due to its small size, location, and customer base.

The sand filter plant was originally designed and built to serve the Gathright project buildings and Morris Hill Campground. No additional customers or added usage has occurred since its inception. There is no industrial or manufacturing discharge of any kind sent to the plant. Actual domestic loads handled by the plant have declined significantly over the past five years.

The system has minimal infiltration during extreme wet weather events. Being located in the mountainous area I do not see a likely enough source of PCBs in our service area to justify the testing of a contaminant that is so unlikely to be present.

Thank you for your understanding and assistance in these matters. Please let us know if we need to do anything further at this time.

Sincerely,

William C. Siple,
Facility Manager, Gathright Dam Project

France, Becky (DEQ)

From: Lockridge, Anthony L. NAO [Anthony.L.Lockridge@usace.army.mil]
Sent: Tuesday, March 11, 2014 11:49 AM
To: France, Becky (DEQ)
Subject: RE: Application (UNCLASSIFIED)
Attachments: scan0001.jpg

Classification: UNCLASSIFIED
Caveats: NONE

I have fixed it and had Bill Signature it. Will the scan copy of this work for you are will I need to mail it to you.

Thanks Anthony Lockridge

-----Original Message-----

From: France, Becky (DEQ) [mailto:Becky.France@deq.virginia.gov]
Sent: Thursday, March 06, 2014 10:57 AM
To: Lockridge, Anthony L. NAO
Subject: [EXTERNAL] RE: Application (UNCLASSIFIED)

Thank you for the application data. Please revise page 6 of the application to include the data (E. coli with no. of samples, method, detection limit, result etc.) and have Mr. Siple re-sign and date page 6 as an acknowledgement of the change revision and send a copy to this office. On page 6 also cross out fecal coliform and change it to E. coli. The application directions allow the submission of E. coli for this form. It OK to leave the signature and date and just add another signature and date to the page.

-----Original Message-----

From: Lockridge, Anthony L. NAO [mailto:Anthony.L.Lockridge@usace.army.mil]
Sent: Wednesday, March 05, 2014 7:31 AM
To: France, Becky (DEQ)
Subject: RE: Application (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

I wanted to see is you received our test results. And see what else is needed.

Thanks for all your help

Anthony lockridge

-----Original Message-----

From: France, Becky (DEQ) [mailto:Becky.France@deq.virginia.gov]
Sent: Tuesday, February 18, 2014 1:58 PM
To: Lockridge, Anthony L. NAO
Subject: [EXTERNAL] RE: Application (UNCLASSIFIED)

I have looked at your application for the reissuance (VA0032115). I notice that there is no E. coli data for A.12 page 6 of the application. E. coli data rather than fecal coliform data is needed because the water quality standards are written in terms of E. coli rather than fecal coliform. Please provide E. coli data for 1 grab sample. Please add the data to page 6 of the application in addition to submitting the laboratory summary report sheet for the analysis. Also please provide another signature and date from Mr. Siple acknowledging the changes to the application (on page 6).

France, Becky (DEQ)

From: Lockridge, Anthony L. NAO [Anthony.L.Lockridge@usace.army.mil]
Sent: Thursday, February 27, 2014 8:49 AM
To: France, Becky (DEQ)
Subject: E.coli Test (UNCLASSIFIED)
Attachments: IMG_0003 (3).pdf

Classification: UNCLASSIFIED

Caveats: NONE

The sample was on ice but we took it off the ice at the truck and carried it into them. And they did not take it out of the ice so they could not say it was on ice. We always take our samples in on ice but this was one small bottle so we just carried it in. We will be sure from now on to take the samples in and let them take it out of the ice.

Thanks Anthony Lockridge

Classification: UNCLASSIFIED

Caveats: NONE

17-Jan-2014

Department of Environmental Quality
Commonwealth of Virginia
West Central Regional Office
3019 Peters Creek Road
Roanoke, VA 24019

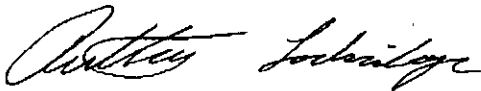
Dear Ms Becky France

Subject: REISSUANCE EXISTING PERMIT VPDES
PERMIT NO. VA0032115
MORRIS HILL WASTE WATER TREATMENT PLANT

This letter is in connection with the reissuance of the U.S. Army Corps of Engineers Permit Number VA0032115. Please find enclosed the permit application form (Form 2A NPDES) completed. You will find the original and three copies as required; a copy will be furnished to the Virginia Department Health as requested.

If there are any questions, feel free to contact us by phone at 540-962-1138 from 8:00AM to 3:30PM Monday thru Friday.

Sincerely



Anthony L. Lockridge
Equipment & Facilities Assistant
US Army Corps of Engineers



FACILITY NAME AND PERMIT NUMBER:

Morris Hill WWTP VA0032115

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name Morris Hill sewage Treatment PlantMailing Address P.O. Box 432
Covington, VA 24426-0432Contact person Mr. Anthony LockridgeTitle Equipment & Facilities AssistantTelephone number (540) 962-1138Facility Address Coles Mountain Road (SR 605)
(not P.O. Box) Covington, VA 24426

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name _____

Mailing Address _____

Contact person _____

Title _____

Telephone number _____

Is the applicant the owner or operator (or both) of the treatment works?

_____ owner _____ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

_____ facility _____ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0032115

PSD _____

UIC _____

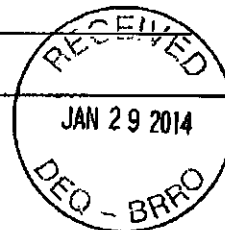
Other _____

RCRA _____

Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>Morris Hill Campground</u>	<u>55 Campsites</u>	<u>Sanitary</u>	<u>US Forest Service</u>
<u>Morris Hill Picnic Area</u>	<u>1 Restroom</u>	<u>Sanitary</u>	<u>US Army Corps of Engineer</u>
<u>Visitor Center/Complex</u>	<u>7 Employees/Visitor</u>	<u>Sanitary</u>	<u>US Army Corps of Engineer</u>
Total population served _____			



FACILITY NAME AND PERMIT NUMBER:

Morris Hill WWTP VA0032115

Form Approved 1/14/99
OMB Number 2040-0086

A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 0.015
- mgd

	<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>
b. Annual average daily flow rate	<u>.0018</u>	<u>.0018</u>	<u>.0018</u> mgd
c. Maximum daily flow rate	<u>.0018</u>	<u>.0018</u>	<u>.0018</u> mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100 %
☐ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1
ii. Discharges of untreated or partially treated effluent None
iii. Combined sewer overflow points None
iv. Constructed emergency overflows (prior to the headworks) None
v. Other _____

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: _____
Annual average daily volume discharged to surface impoundment(s) _____ mgd
Is discharge _____ continuous or _____ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: _____
Number of acres: _____
Annual average daily volume applied to site: _____ Mgd
Is land application _____ continuous or _____ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☒ Yes ☐ No

FACILITY NAME AND PERMIT NUMBER:

Morris Hill WWTP VA0032115

Form Approved 1/14/99
OMB Number 2040-0086

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

Hauled to another plant when it builds up. Last Done 2011

If transport is by a party other than the applicant, provide:

Transporter name: Miller's Septic Tank Service

Mailing Address: 201 S. Lexington Ave.
Covington, VA 24426

Contact person: David Miller

Title: Owner Operator

Telephone number: (540) 962-6366

For each treatment works that receives this discharge, provide the following:

Name: Covington Sewage Treatment Plant

Mailing Address: Edgemont Drive
Covington, VA 24426

Contact person: George Jamison

Title: Chief Operator

Telephone number: (540) 965-6328

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility.

N/A mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

☐ Yes

☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method:

Is disposal through this method ☐ continuous or ☐ intermittent?

FACILITY NAME AND PERMIT NUMBER:

Morris Hill WWTP VA0032115

Form Approved 1/14/99
OMB Number 2040-0066

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 1
- b. Location
- | | |
|-------------------------------|-------------------|
| (City or town, if applicable) | (Zip Code) |
| <u>Allegany County</u> | <u>Virginia</u> |
| (County) | (State) |
| <u>37 56' 54"</u> | <u>79 56' 57"</u> |
| (Latitude) | (Longitude) |
- c. Distance from shore (if applicable) 20 ft.
- d. Depth below surface (if applicable) 2 ft.
- e. Average daily flow rate .0018 mgd
- f. Does this outfall have either an intermittent or a periodic discharge? ☒ Yes ☐ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: 65
- Average duration of each discharge: 20Min
- Average flow per discharge: .0018 mgd
- Months in which discharge occurs: 12
- g. Is outfall equipped with a diffuser? ☐ Yes ☒ No

A.10. Description of Receiving Waters.

- a. Name of receiving water Jackson River
- b. Name of watershed (if known) Jackson River Basin
- United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin (if known): Jackson River (Upper)
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): 02080201
- d. Critical low flow of receiving stream (if applicable):
acute 100 cfs chronic 150 cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): Unknown mg/l of CaCO₃

Morris Hill WWTP VA0032115

A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☐ Primary☐ Secondary☐ Advanced

Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal _____ %

Design SS removal _____ %

Design P removal _____ %

N/A

Design N removal _____ %

N/A

Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☐ Yes

No

- d. Does the treatment plant have post aeration?



Yes



No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 1

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.0	s.u.			
pH (Maximum)	9.0	s.u.			
Flow Rate	.0063	MGD	.0018	MGD	3 years
Temperature (Winter)	13.0	C'	10.16	C'	5
Temperature (Summer)	22.7	C'	21.36	C'	10

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	30	MG/L	2	MG/L	8	SM5210 B	2MG/L
	CBOD-5							
FECAL COLIFORM <i>E. coli</i>		1	MG/L	1	MG/L	1	Colilert MPN	1 MPN/100ML
TOTAL SUSPENDED SOLIDS (TSS)		30	MG/L	5	MG/L	8	SM2540 D	1MG/L

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

William P. Byrle 3-11-14
acknowledgment of change

FACILITY NAME AND PERMIT NUMBER:

Morris Hill WWTP VA0032115

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:



Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)☐ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title William C. Siple / Acting Facility MangerSignature Telephone number (540) 962-9261Date signed 1-27-14

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

VPDES PERMIT APPLICATION ADDENDUM - SUPPLEMENTARY INFORMATION

A. General Information

1. Entity to whom the permit is to be issued: US Army Corps of Engineers
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2. Classify the discharge as one of the following by checking the appropriate line:
☒ a. Existing discharge
☐ b. Proposed discharge
☐ c. Proposed expansion of an existing discharge
3. Year the current wastewater treatment facility began operation: 1981
4. Provide NAICS Code (Industrial Only) _____

B. Location

1. Is this facility located within city or town boundaries? Y ☒ (N)
2. (New Issuances & Modifications Only) What is the tax map parcel number for the land where this facility is located? _____
3. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? _____
4. Attach to the back of this application a location map(s) which may be traced from or is/are a production of a U.S. Geological Survey topographic quadrangle(s) or other appropriately scaled contour map(s). The location map(s) shall show the following:
 - a. Treatment Plant
 - b. Discharge point
 - c. Receiving waters
 - d. Boundaries of the property on which the treatment plant is located, or to be located.
 - e. Distance from the treatment plant to the nearest: (Indicate "not applicable" for any distance greater than 2000 feet)
 - i. Residence
 - ii. Distribution line for potable water supply
 - iii. Reservoir, well, or other source of water supply
 - iv. Recreational area
 - f. Distance from the discharge point to the nearest: (Indicate "not applicable" for any distance greater than 15 miles)
 - i. Downstream community
 - ii. Upstream and downstream water intake points
 - iii. Shellfishing waters
 - iv. Wetlands area
 - v. Downstream impoundment
 - vi. Downstream recreational area

C. Discharge Description

1. Provide a brief description of the wastewater treatment scheme. Also, attach to this application, a process flow diagram showing each process unit of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system.

1. Septic Tank
2. Dosing Tank
3. Siphons discharge to sand filters
4. Chlorination
5. Dosing Tank
6. Chlorine Contact Tank
7. Aeration Channel

2. What is the design average flow of this facility? .015 MGD
Industrial facilities: What is the max. 30-day avg. production level (include units)? .0063

3. In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y / N

If "Yes", please specify the other flow tiers (in MGD) or production levels: _____

Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

4. Nature of operations generating wastewater:

100 % of flow from domestic connections/sources

Number of private residences to be served by the wastewater treatment facilities:

 0 1-49 50 or more

100 % of flow from non-domestic connections/sources

5. Mode of discharge: Continuous Intermittent Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

6. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

- ☒ Permanent stream, never dry
☐ Intermittent stream, usually flowing, sometimes dry
☐ Ephemeral stream, wet-weather flow, often dry
☐ Effluent-dependent stream, usually or always dry
☐ Lake or pond at or below the discharge point
☐ Other: _____

E. Anticipated Phasing Schedule for Plant Capacity - Proposed / Expanding Discharges

If this application is for a proposed or expanded discharge(s), complete the phasing schedule below beginning with the year in which construction completion is anticipated and progressing in increments of 5 years for 30 years thereafter.

Proposed Design Capacity: _____ MGD

Anticipated Date of Construction Completion: _____
Month Year

Years after Completion	Projected Flow (MGD)
0	
5	
10	
15	
20	
25	
30	

F. Interim Facilities

Are the wastewater treatment facilities interim? (designed for a useful life of less than 5 years)

_____ Yes _____ No

If so, provide the estimated date to be discontinued (month, year) _____, and the name and location of the intended replacement facility.

Name / Location

G. Privately Owned Treatment Works

If this application is for a privately owned treatment works serving, or designed to serve, 50 or more residences, you must include with your application notification from the State Corporation Commission that you are incorporated in the Commonwealth AND verification from the SCC that you are in compliance with all regulations and relevant orders of the State Corporation Commission. Incorporated also includes Limited Liability Companies (LLCs), Limited Partnerships (LPs) and certificates of authority.

H. Consent to Receive Electronic Mail

The Department of Environmental Quality (DEQ) may deliver permits and certifications (this includes permit issuances, reissuances, modifications, revocation and reissuances, terminations and denials) to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check *only one* of the following to consent to or decline receipt of electronic mail from DEQ as follows:

- ☒ Applicant or permittee agrees to receive by electronic mail the permit that may be issued for the proposed pollutant management activity, and to certify receipt of such electronic mail when requested by the DEQ.
- ☐ Applicant or permittee declines to receive by electronic mail the permit associated with the permit that may be issued for the proposed pollutant management activity.

PUBLIC NOTICE BILLING INFORMATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2:

Newspaper Name: Virginian Review (Covington, Va)

Agent/Department to be billed: US Army Corps of Engineers

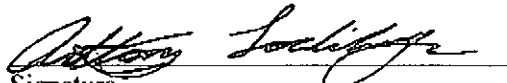
Owner: US Army Corps of Engineers

Applicant's Address: P.O Box 432

Covington, Va 24426

Agent's Telephone No: 540-962-1138

Authorizing Agent:


Signature

Anthony Lockridge

Printed Name

Equipment & Facilities Assistant

Title

Facility Name: Morris Hill WWTP

Permit No. VA0032115

Please return to:

Becky L. France
Department of Environmental Quality
3019 Peters Creek Road
Roanoke, VA 24019
Fax No. (540) 562-6725



3404 Aerial Way Drive • Roanoke, VA 24018
Phone (540) 343-3618 • Fax (540) 342-2054

U.S. Army Corps of Engineers
Rt. 605 Coles Mountain Road

Covington

VA 24426

Certificate of Analysis

Date Reported: February 26, 2014

Sample Code: 14-0396

Chain of Custody Information

Date Collected: February 25, 2014

Time Collected: 0900

Collected By: Timothy Flanagan

Collection Method: Grab

Sample Description:

Date Received: February 25, 2014

Time Received: 1120

Sample Type: Waste Water

Project Name: MPN

Analytical Notes: *Sample received to WCI >6°C. Sample not received on ice. Results may not be in compliance for VPDES reporting.

Project Notes: QL=Level of Quantitation

Analytical Data and Quality Assurance Information

Sample Code: 14-0396

Parameter	Result	QL	Method	Date/Time	Analyst
E. Coli*	1 MPN/100 mL	1 MPN/100 mL	Colilert MPN	02/25/14 1150	JLA

Test results meet all requirements of NELAC unless otherwise indicated. Analytical data meet precision and accuracy criteria established by the U.S.E.P.A. for drinking water, waste water, and solid wastes. Exceptions are noted in the analytical notes section of the certificate of analysis. Handling, preservation and collection of samples are performed according to E.P.A. protocol and 40 CFR part 136 and/or 141 and amendments. Reproduction of this report is not permitted, except in full, without written approval from Water Chemistry, Inc. The results on this report relate only to the sample(s) provided for analysis.

VELAP ID: 460020

Galinda D. Stenberg-Hedrick
Laboratory Technician



3404 Aerial Way Dr., SW • Roanoke, VA 24018
Telephone: 540/343-3618 • Fax: 540/342-2054

CHAIN OF CUSTODY - A

Client * U.S. A.C.E		Project Name		Permit No.	
Client Address * Rt. 205 Collesmont Road 605 Covington VA 24426		Collected By * Timothy FLANAGAN		Project No. /Purchase Order No.	
Contact Person * Bill Siple		Phone No. 703-210-1114		Fax No. -mil	
Lab Code No.	Date/Time Collected	Client Sample I.D.	Sample Type	Collection Method	
14-0396	2-25-14 0900				
Chemical Preservation Codes					Remarks: not rec'd on ice
No. of Containers					
Bottle Code					
MPN-Ecoli					
Preservation Check					
Temperature 7.9 °C pH					
Tech/Date 2/25/14 JLA Tech/Date					
Handling Instructions					
<input type="checkbox"/> 24 Hrs. <input type="checkbox"/> 48 Hrs. <input type="checkbox"/> 5-day <input type="checkbox"/> Standard					
x 2 x 1.5 x 1.25					
Chemical Preservation Code					
B = Bacti O = Other					
C = NaOH S = Sulfuric					
N = Nitric T = Thio					
H = HCL I = Iced					
Paid <input type="checkbox"/> Check <input type="checkbox"/> Invoice <input checked="" type="checkbox"/>					
Amount Cash <input type="checkbox"/> Customer must have account					
Revision Number: 2 Effective Date: 11/15/2011					

Testing done
In-house.
Only one
chain of custody
with this test.

Preservation Check

Temperature **7.9 °C**

pH

Tech/Date

Tech/Date **2/25/14 JLA**

Tech/Date

Handling Instructions

☐ 24 Hrs. ☐ 48 Hrs. ☐ 5-day ☐ Standard
x 2 x 1.5 x 1.25

Chemical Preservation Code

B = Bacti O = Other
C = NaOH S = Sulfuric
N = Nitric T = Thio
H = HCL I = Iced

Transfer #

Relinquished By

Date

Time

Accepted By

A

Timothy R. Flanagan

2-25-14

1120

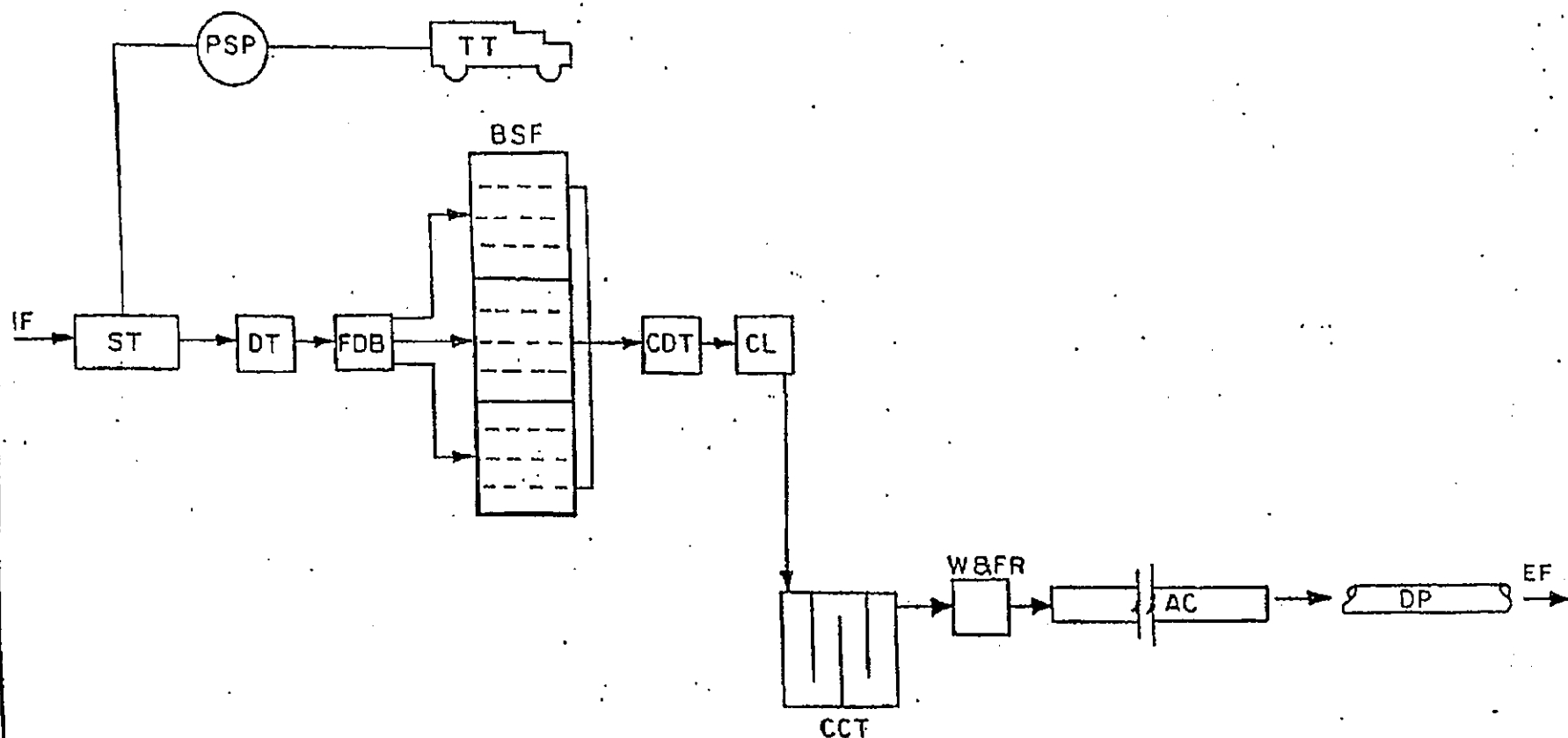
J. Aldridge

B

C



U.S. GEOLOGICAL SURVEY
FALLING SPRING QUADRANGLE
7.5 MINUTE SERIES
SCALE: 1:24,000



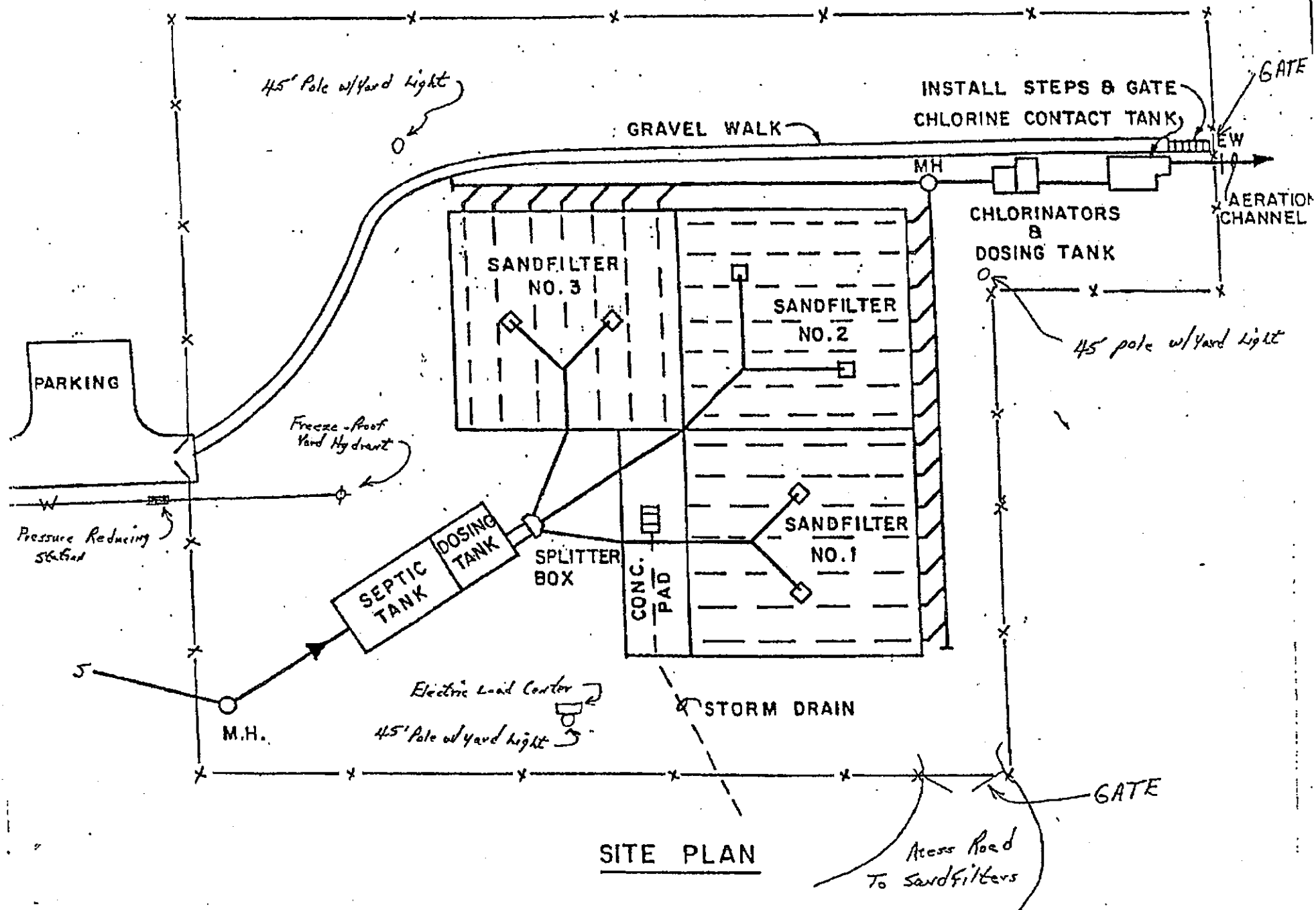
MORRIS HILL STP FLOW DIAGRAM

ABBREVIATIONS

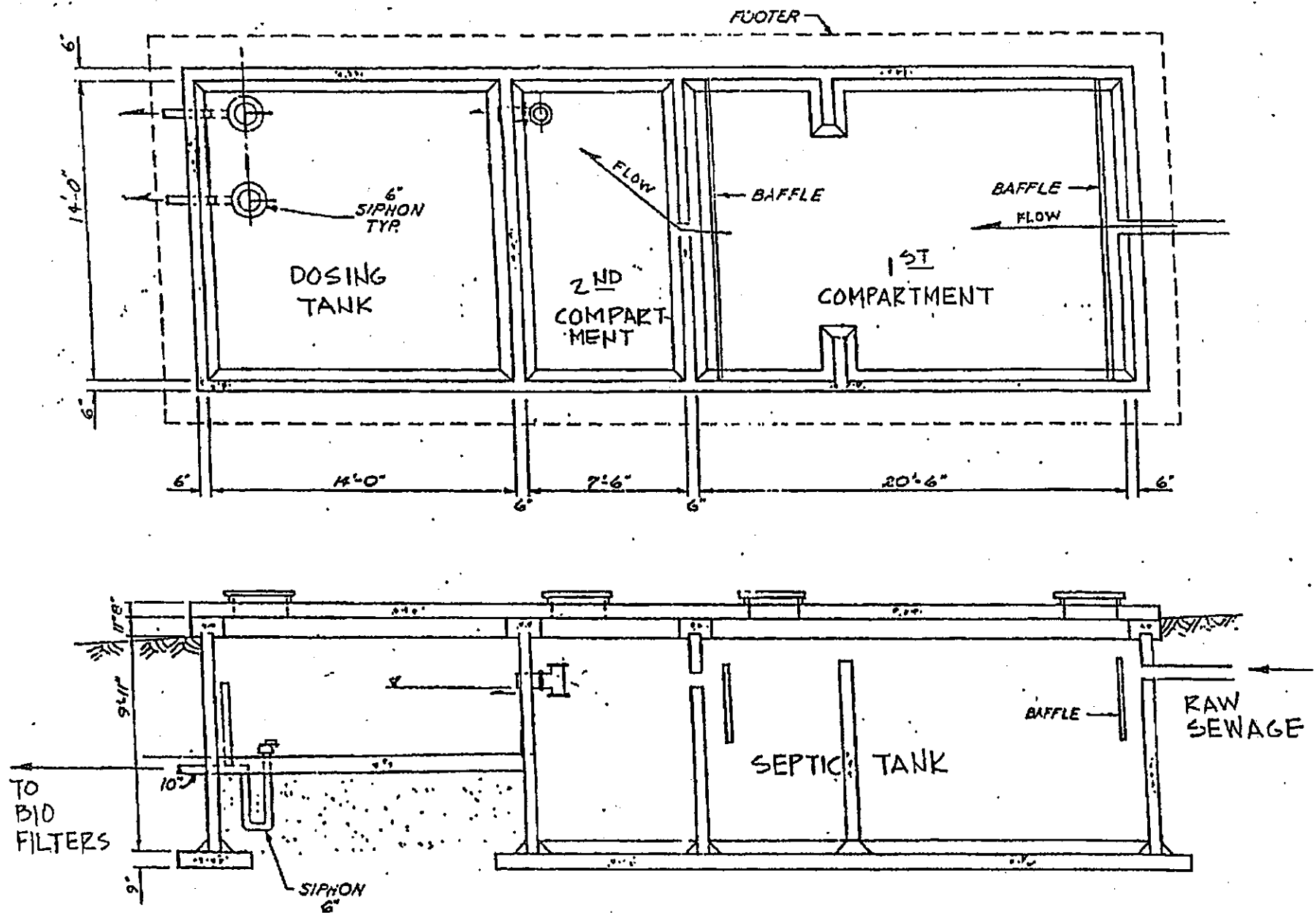
PLATE 2

TT - TANK TRUCK
 PSP - PORTABLE SLUDGE PUMP
 IF - INFLUENT SEWAGE
 ST - SEPTIC TANK
 DT - DOSING TANK
 FDB - FLOW DISTRIBUTION BOX
 BSF - BIOLOGICAL (INTERMITTENT) SAND FILTERS

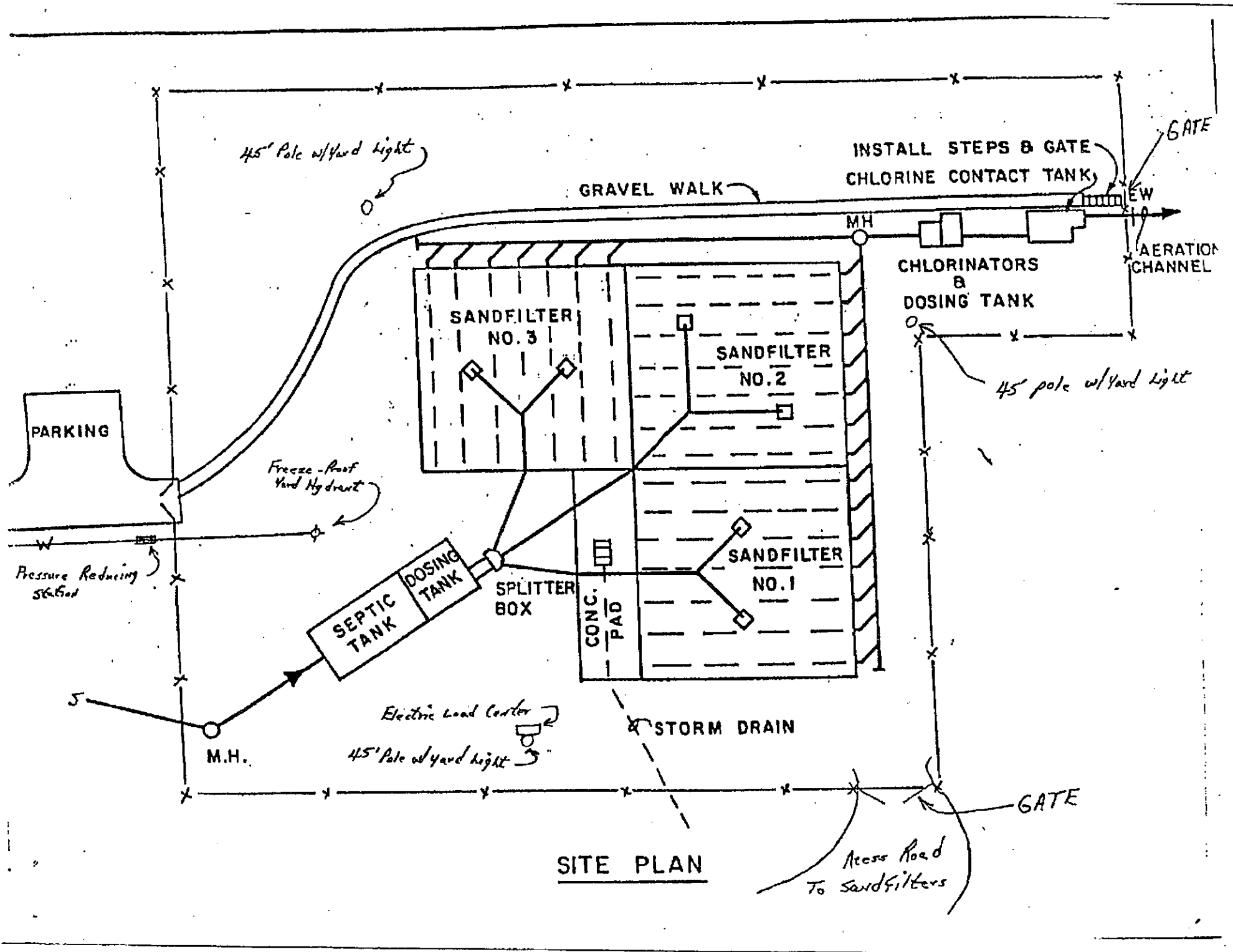
CDT - CHLORINATOR DOSING TANK
 CL - CHLORINATORS
 CCT - CHLORINE CONTACT TANK
 W & FR - WEIR & FLOW RECORDER
 AC - AERATION CHANNEL
 DP - DIFFUSER PIPE
 EF - EFFLUENT

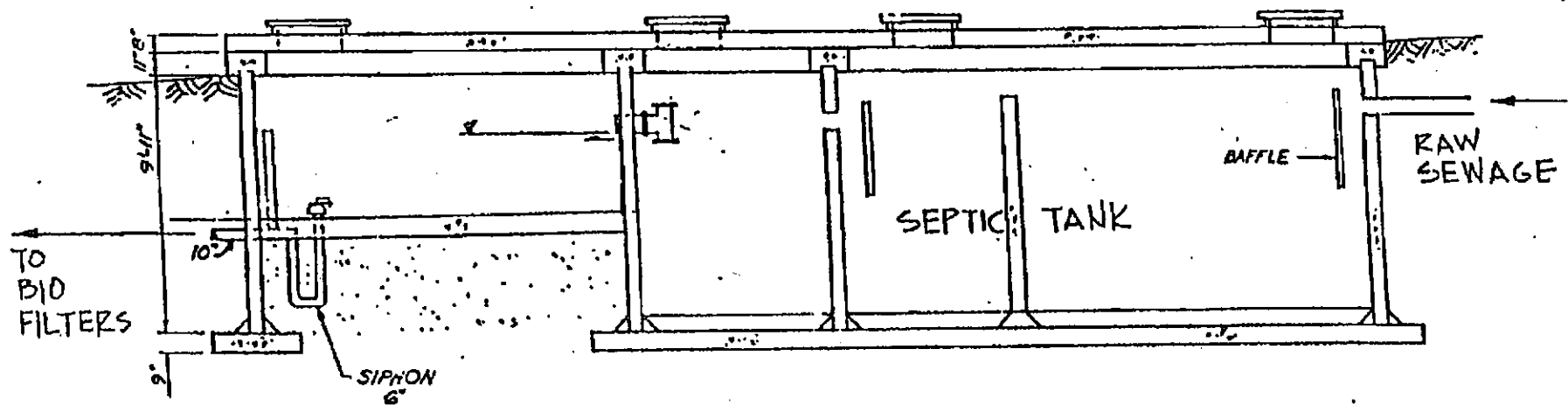
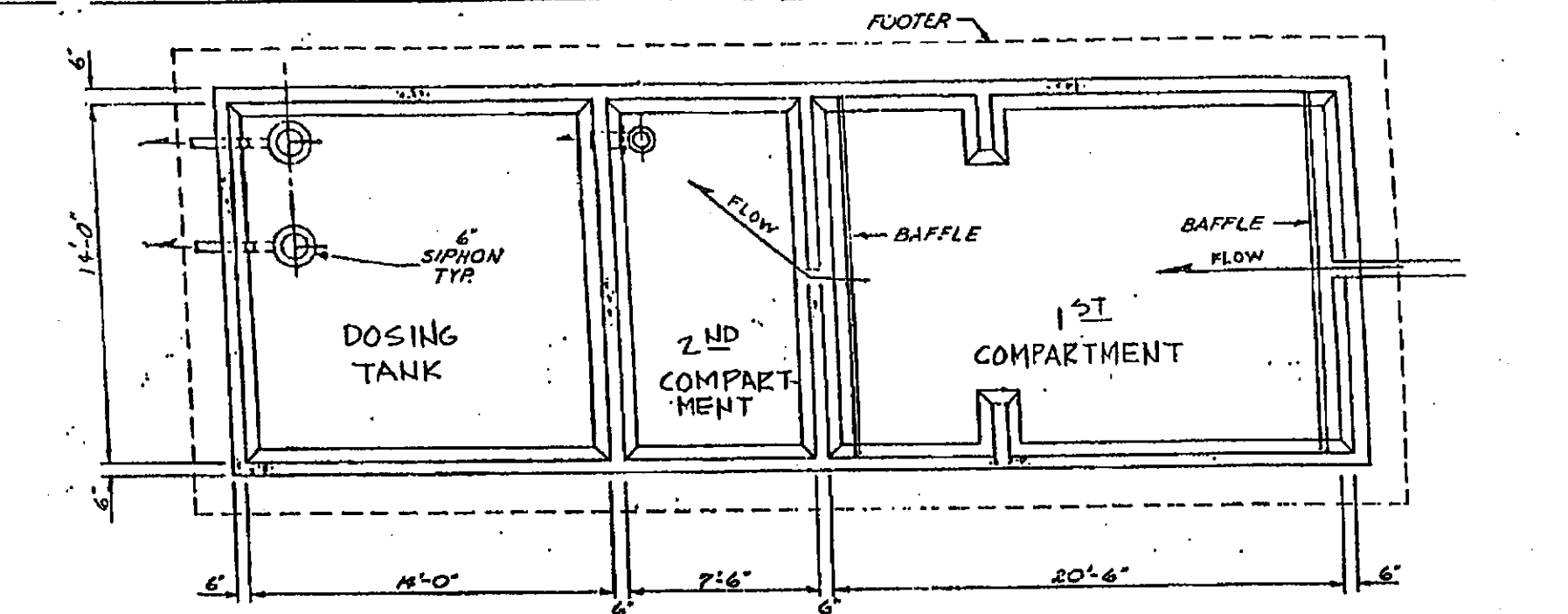


SITE PLAN

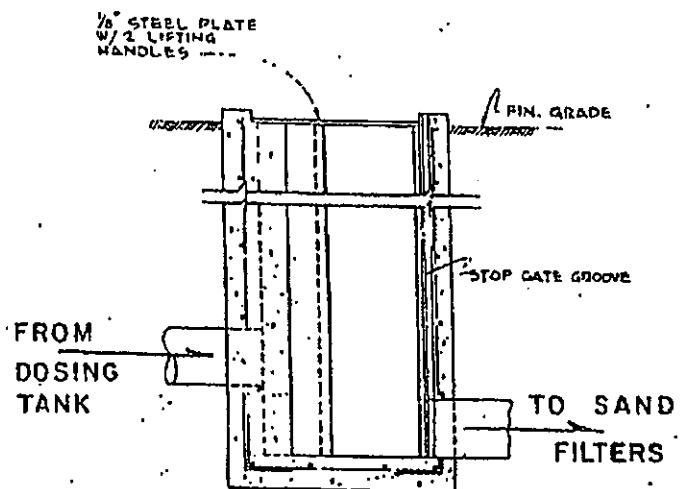


SEPTIC TANK

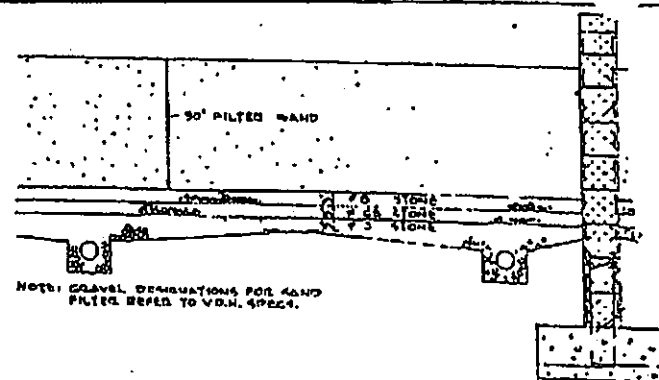
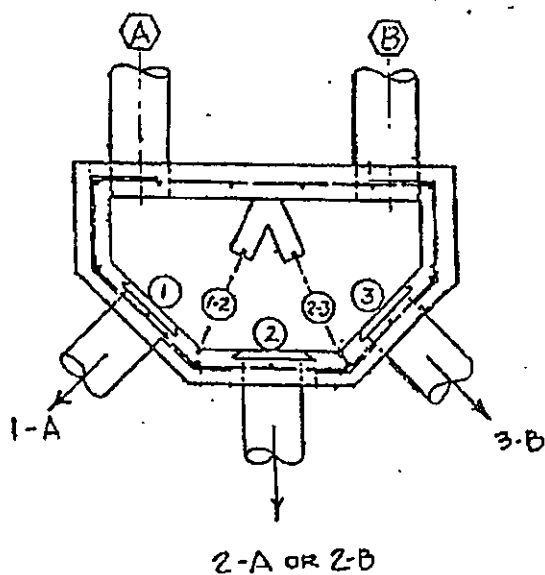




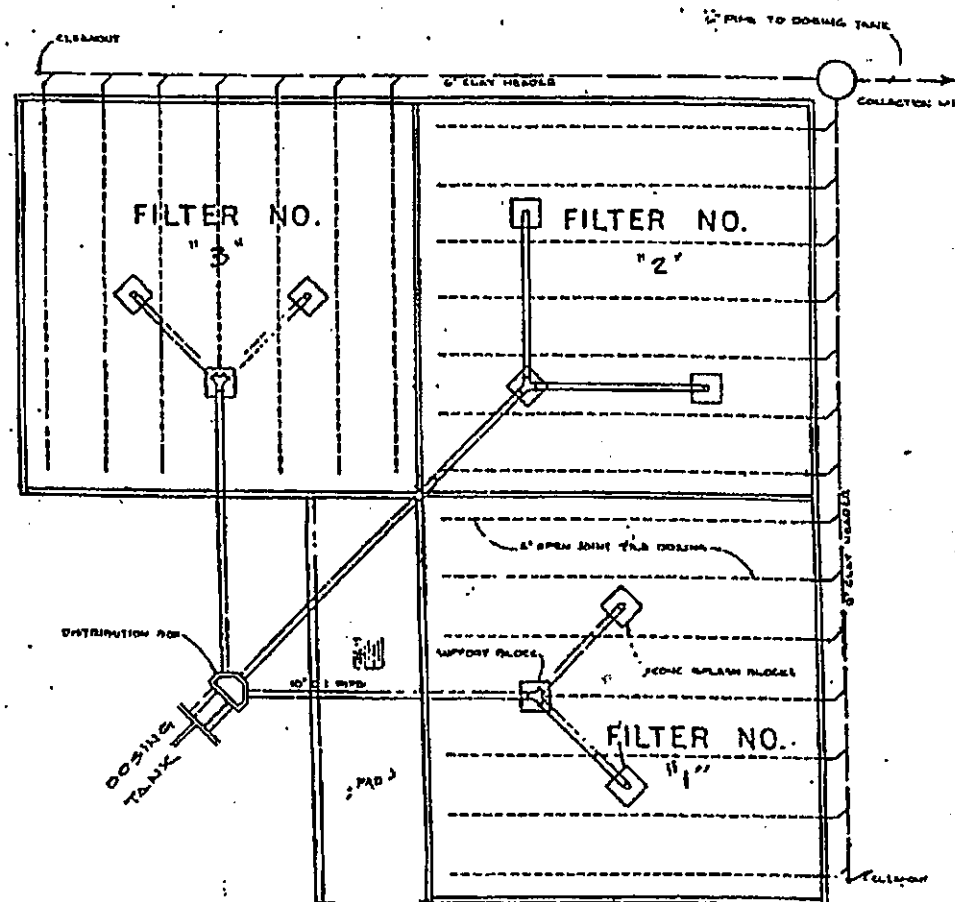
SEPTIC TANK



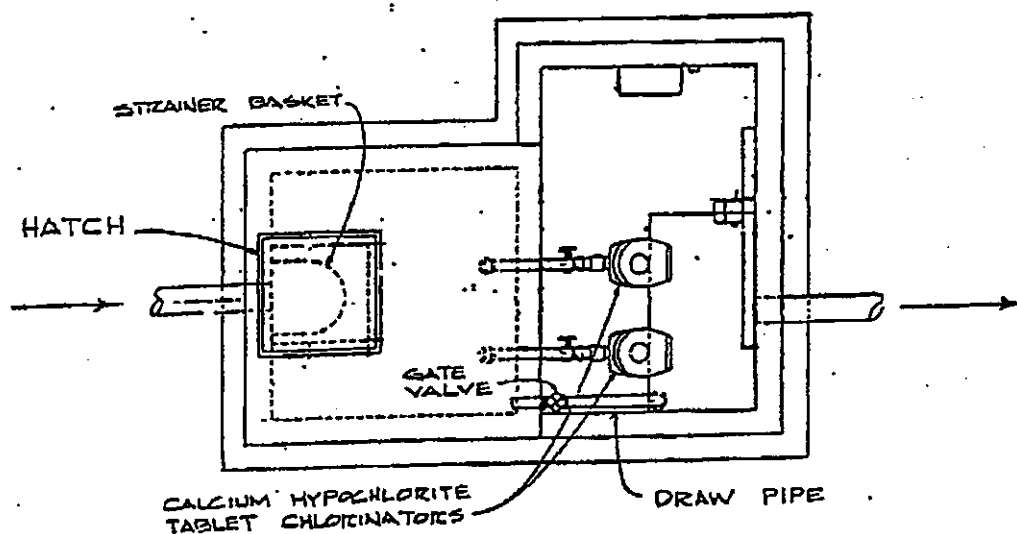
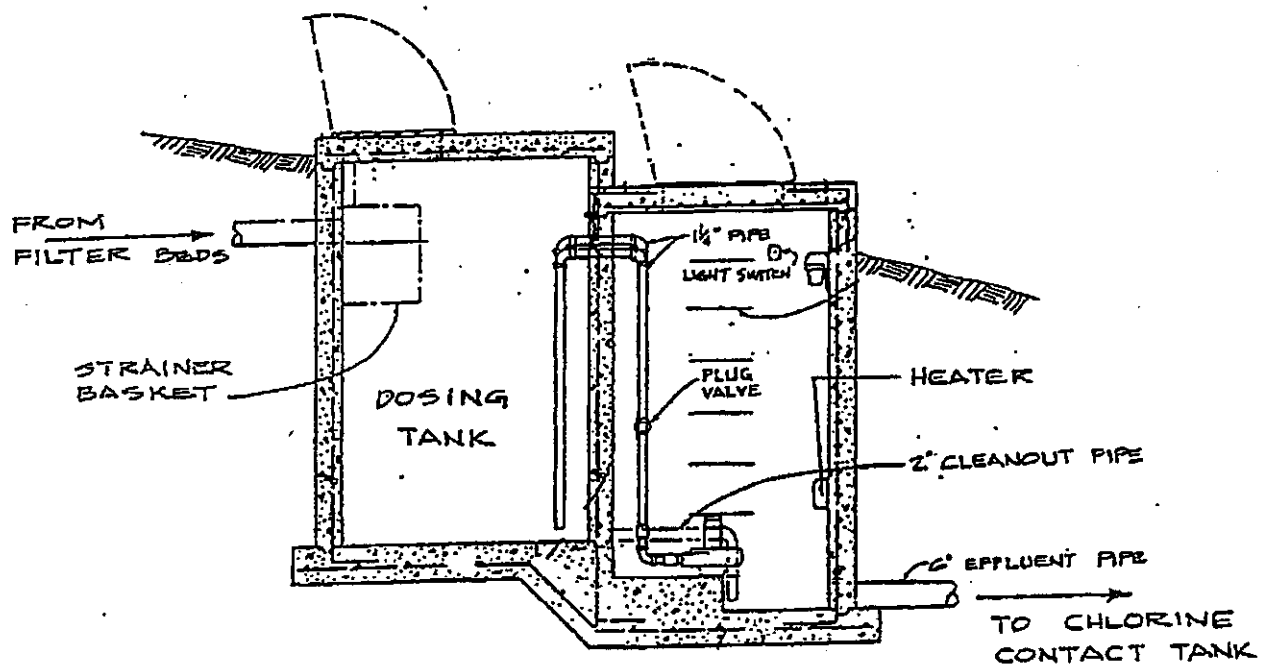
DISTRIBUTION BOX



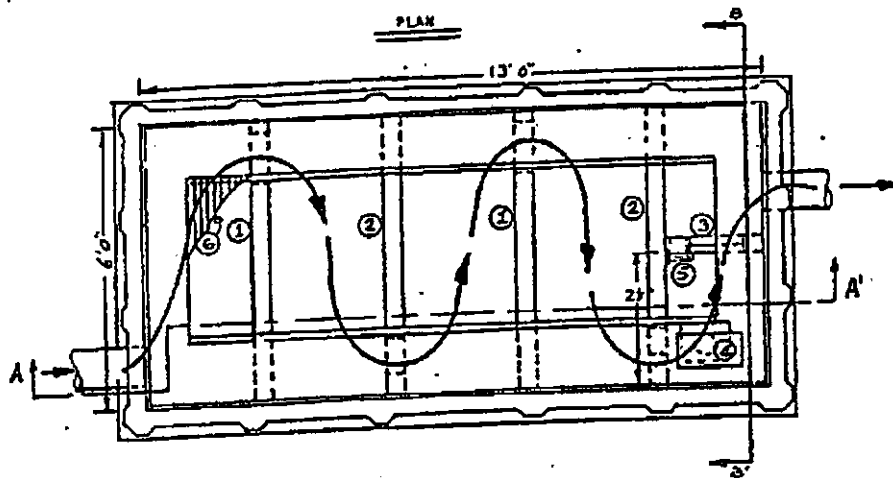
TYPICAL FILTER SECTION



BIO SAND FILTERS

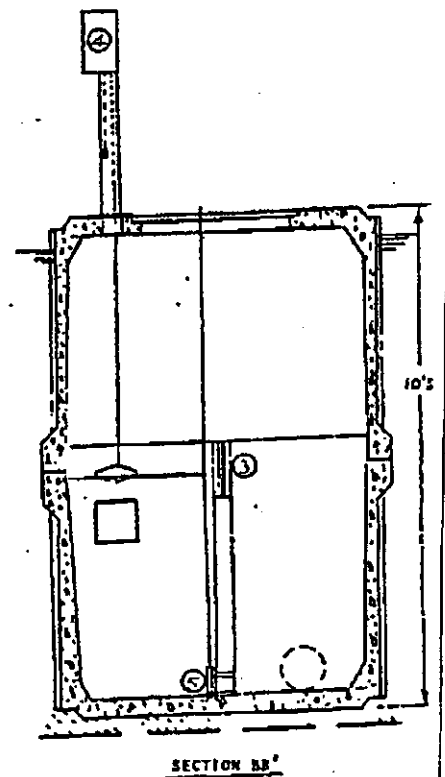
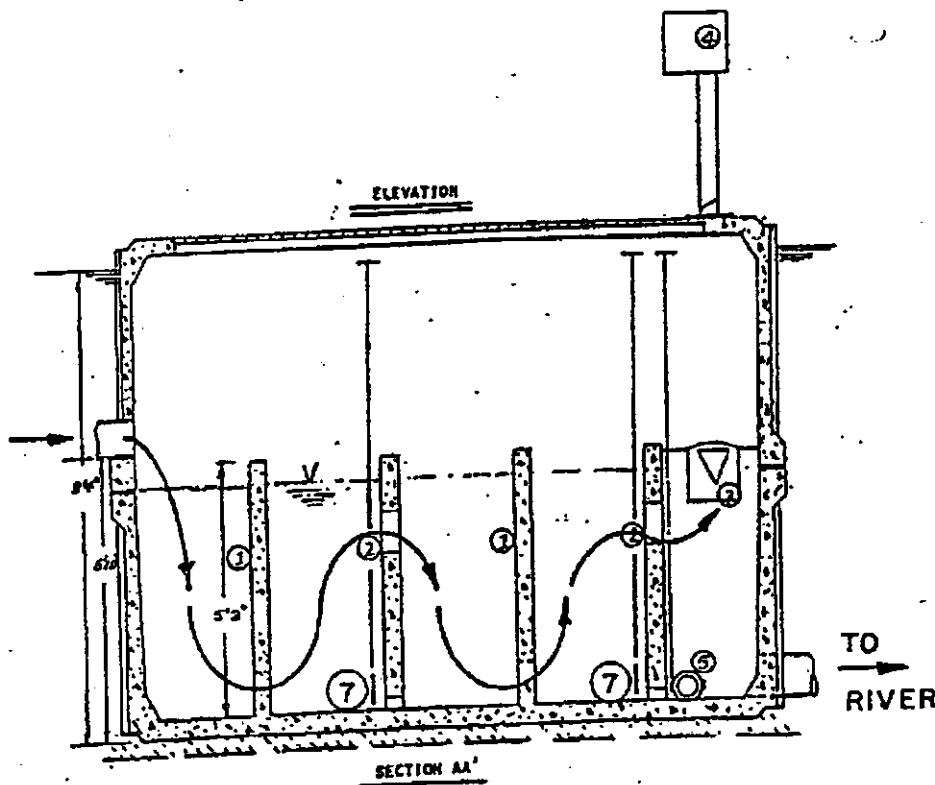


CHLORINATOR DOSING TANK & CHLORINATORS

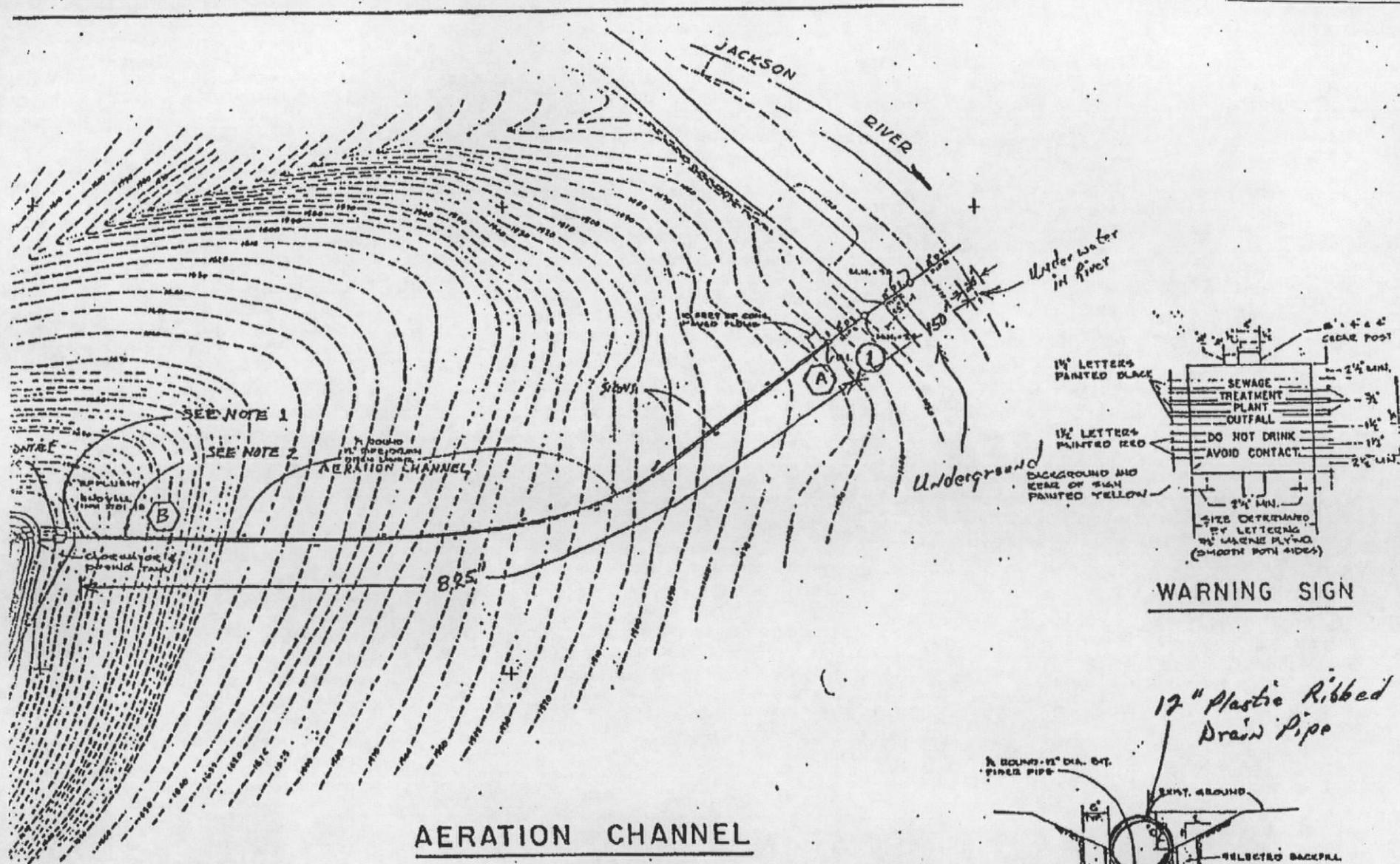


- ① BAFFLE - 4" CONCRETE W/ 10" X 10" BOTTOM OPENING.
- ② BAFFLE - 4" CONCRETE W/ 10" X 10" TOP OPENING & 2" X 3" BOTTOM DRAIN.
- ③ "V" NOTCH WEIR - 30" X 8" HT.
- ④ FLOW RECORDER W/ ENCLOSURE AND PIPE STAND.
- ⑤ 4" SHEAR GATE W/ HANDLE (H & W STYLE # 44)
- ⑥ ALUMIN. GRATING, 1 BAR 1" (KIA 100, 5" X 345 IN. 57 KG IND.)
- ⑦ DRAIN GATES

FLOW PATH



CHLORINE CONTACT TANK & FLOW RECORDER



- NOTE: 1. 12" diameter ribbed plastic drain pipe was installed in aeration channel in 1992 to eliminate problem with leaves, sticks, etc. clogging channel.

